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ABSTRACT

In order to learn more about the potential of television for teaching prosocial values, an experiment is described which will use as subjects preschool children attending nursery schools or day care centers. Brief videotapes, 15-20 minutes long, will be made from material taken primarily from Sesame Street. They will vary in the explicitness of the prosocial behavior message. Baseline data will be gathered for each child which measures stage of cognitive development, their level of positive social behavior, level of cooperative behavior, and previous exposure to Sesame Street. Before and after viewing the videotapes each child will be observed in the school setting. The resulting data will be analyzed to determine what, if any, effect viewing the videotapes had on the behavior of the children. (JY)

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ENCOURAGING SOCIAL COMPETENCE WITH TELEVISION

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February, 1973

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Over the last decade there has been increasing interest in the potential of television for teaching and encouraging both desirable and undesirable social behaviors and for teaching cognitive skills and general information. Given the amount of time children and adults devote to viewing television and the fact that 95% of the households in the United States have an operating television set, there is every reason to want to put this availability and time to good use. This would surely include television viewing for entertainment and relaxation but might add to it some teaching of cognitive skills, general information, current events, and socially approved interpersonal behavior.

By now there is little doubt that the social behaviors of young children within experimental settings will be influenced by recent, short media exposure to the relevant social behavior of others. Within naturalistic situations there is growing evidence that repeated exposure of young children to similar behavior on television will influence aggression (Stein and Friedrich, 1972; Steuer, 1972), interpersonal prosocial behavior (Stein and Friedrich, 1972), and self control behaviors (Stein and Friedrich, 1972). There is as yet little work in this latter area and there is little understanding of the more effective methods for using television to increase positive social behavior in young children.

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Such an understanding includes knowing what aspects of "positive social interaction" to focus on. Should one portray only the desired positive behavior rather than other less desirable, but more common, behaviors? Should one focus upon the conflict which could elicit either desirable or undesirable behavior to resolve it? Should one help the child viewer to feel good about himself/herself assuming that one treats others well when one feels good about oneself? Should one include clear positive consequences for positive social behavior? There is evidence that children learn and imitate both desired and undesired behaviors they see on television (cf., Murray, Rubinstein, and Comstock, 1972), so the first alternative of showing only those behaviors one wishes to encourage is reasonable. By the same token, the second alternative does not seem reasonable most of the time, although much current teaching of prosocial behavior includes long sequences of conflict before arriving at the prosocial behavior that resolves it. There is evidence that adults and children who feel good treat others well (Isen and Levin, 1972; Moore, Underwood, and Rosenhan, 1973), so the third alternative of helping the child feel good about himself/herself has some merit. Finally, there is evidence that vicarious positive consequences increase the probability that the behavior associated with them will be performed by the viewer (Bandura, 1965). Thus there is experimental evidence to support each of three strategies for encouraging prosocial behavior with television and actual practice to suggest examining a fourth strategy.

A second area in which more understanding is needed is that of the more effective characters for encouraging positive social behaviors. Should one use children, adults, animals, cartoon characters, abstract shapes, or some

combination of each? How closely should characters resemble the child viewers? Children's television typically uses children, adults, animals, cartoon characters who are children, adults, and animals, and abstract forms to instruct and entertain. An example of such a mixed approach comes from content analyses of the second year of Sesame Street (Bogatz and Ball, 1972). Comparing just people and the muppets in their data, one finds that cooperation was taught 60% of the time by people and 16% by the muppets, different perspectives were taught 24% of the time by people and 38% by the muppets, and emotions were taught only 7% of the time by people and 47% by the muppets. From the data one cannot tell what part of the time humans were children and what part, adults.

One might argue that any viewer, but especially the younger one, will learn most from situations and characters most similar to himself/herself. There is some evidence to this effect with children older than six (Holaday and Stoddard, 1933; Maccoby and Wilson, 1957). Piaget (cf., Flavell, 1963) has delineated the dependence of the young child on concrete objects and actions and his/her lesser ability to generalize from one instance to the next. Sigel (1971) has suggested that young children, particularly disadvantaged children, have much to learn about distancing between self and the immediate environment such that they can operate well upon representations of objects and actions. However, there is some research showing that preschoolers are equally aggressive after watching a live human model, a film of the same model, and a film of the same model dressed as a cat (Bandura, Ross, and Ross, 1963) and that children and adults will give animate interpretations and motives to the movements of abstract shapes (Fein, 1973; Michotte,

1963). So there may be some question whether any particular type of character is more effective with young children, although the bulk of evidence suggests that more human- and child-like characters would be more effective.

A third area of interest is the interaction of a child's cognitive ability to take in and operate upon the media presentation with the characteristics of the presentation. There is unsurprising evidence that younger children are less able to remember a film or videotape they have just seen or to understand many of the events in it (Holaday and Stoddard, 1933; Leifer et al., 1971; Leifer and Roberts, 1972). Surprisingly, children apparently do not understand television programs parents and station schedules agree were written for them any better than they understand material aimed at older audiences (Leifer and Roberts, 1972). So we adults still have something to learn about how to get social information across to children. There is every reason to believe that a child's egocentricity, reversibility, sequencing, and a host of other Piagetian-type skills would mediate between the performance the child sees, his/her coding and storage of it, and his/her playback of it in subsequent situations -- and that this would show within any given age or stage. Some recent evidence for this has been gathered for aggression (Thomas, 1972) attitude-behavior consistency (Henshel, 1971), and incorporation of adult prohibitions (Grusec, 1973).

A fourth area of interest is the relationship between a child's habitual performance and the effects of exposure to instances of that behavior. There is some evidence that more aggressive children are more likely to be influenced by an aggressive presentation than are less aggressive children (Collins, 1971; Stein and Friedrich, 1972). This may suggest -- as we all know -- that the rich get richer and the poor poorer an never the twain

shall meet. It may also suggest that to be effective material must be relatively close to and above where the viewer is. Thus, highly aggressive material will be more effective with more aggressive children, perhaps because they have a better framework to grasp, encode, and playback the material. Such a level of presentation finding is frequently reported in the moral judgment literature in which moral reasoning one stage above a child's is most likely to promote and maintain growth toward more advanced reasoning (e.g., Cowan et al., 1969; Turiel, 1966).

The proposed study looks at some of these issues to suggest dimensions of more effective social material, taking into account some audience characteristics. It seeks to compare the effectiveness of material varying on a number of dimensions: the frequency and use of human, muppet, animal, and abstract characters, the explicitness of the portrayed behavior, the occurrence of antisocial behavior in the course of showing a prosocial resolution to conflict, and the amount of material designed to produce positive self-concepts without showing actual prosocial behavior. Varying material on a number of dimensions at once makes it impossible to specify the single most important characteristic of the material which is effective. However, any successful teaching or influence attempt will contain a combination of elements designed to maximize effectiveness and it is this combination one should be searching for. Moreover, attractive, entertaining material for children will include many changes in pace, content, characters, and techniques so that once again one must look for effective combinations of elements, rather than a single, effective element.

The proposed research would combine many elements thought to be effective in encouraging socially competent behavior. The program pieces have all been professionally made for television so that they represent the quality of work generally found on television and generally expected by children. Determination of the effectiveness of each combination of material would help establish clearer guidelines about the components of material that teaches successfully.

Such determinations must be made in conjunction with a consideration of the cognitive and social competence of the intended audience, the types of television material that can be written and produced, and the types of material that will appeal to the intended audience. For these reasons it is desirable to include children of different ages, to measure their initial cognitive and social competence, to relate this to the effectiveness of the material, and to learn how attractive the material is to them. All of these things will be done in this study.

In addition, outcomes will be measured in a situation that very nearly duplicates one or two of those shown in the television pieces as well as in the child's everyday environment. The first measure will provide a low level, but significant, measure of effectiveness, since it asks that the child draw a parallel between two very similar situations adults have exposed him/her to -- one on television and one in a play area. The second measure provides a much more stringent test of effectiveness. It asks that the child learn skill elements from television and perhaps a more general message about useful types of behaviors and apply these in different situations he/she has already encountered often and encounters here without the direct sanction of an adult. It is this latter generalization of behavior which has long term significance, but it is both harder to measure and more difficult to influence.

METHOD

Subjects

Initially, the subjects will be preschoolers attending nursery schools or day care centers in the Boston area. If all goes well, the study would be repeated with seven-year-olds at school or on the playground, perhaps this summer.

Equal numbers of boys and girls would be run. Hopefully there would be racial, ethnic, and SES variation among the subjects with most of them lower middle to middle class from urban environments. About 75 children will be studied in the beginning, assuming there will be some attrition.

Stimuli

Fifteen to twenty minute, half-inch videotapes will be made. They will be black and white, since about two-thirds of all home TV sets in the United States are black and white. Each tape will be composed of material taken from all four seasons of Sesame Street. With the assistance of Elizabeth Weiss, a Radcliffe senior majoring in Visual Studies, and Francis Juhasz, an Ed.M. student, the material will be edited together to produce tapes varying in the explicitness of the prosocial behavior message. If possible, all segments will deal with social behavior or self-concept. This will not be done where it would seriously detract from the interest and artistic quality of the tape. To this end non-social Sesame Street material with appeal may be added. Certain segments may be repeated at various intervals and repetitions of the same message by different characters or in different contexts will be put back to back, whenever possible.

About thirty shows have been examined so far for material, as have CTW lists of which segments teach which social goals. Out of these, more viewing, and at least one trip to CTW should come sufficient material to make the tapes. At least three tapes will be made for each of three categories of explicitness (see Attachment 1). Examples of material are presented in Attachment 2.

Measures

Three measures will definitely be obtained for each child, with two other measures for each child and one for each viewing group if time and resources permit. All children will be tested for their stage of cognitive development, the amount and type of positive social behavior they display in a naturalistic setting, and the amount of cooperative behavior displayed in an experimental setting. If possible, an estimate of how familiar the child is with Sesame Street will be obtained from each mother, each child will be interviewed about his/her understanding and interpretation of the material shown and his/her social behavior, and the attentiveness of each group to the tapes will be scored.

Cognitive development will be tested with a series of Piagetian tasks. Michael Siegal, an Ed.M. student, has contributed to choosing and pre-testing them. They are seriation of sticks, conservation of stick length, seriation of dolls, conservation of doll length, one-to-one equivalence or correspondence, conservation of number, conservation of liquids, and the nature of dreams. The tasks are all ones preschoolers will attempt and some will succeed at. They are such that some of the concepts involved in the tasks will have already been acquired by a number of children, some will

not have been acquired by any four-year-olds and some will be in the process of being acquired. They all involve operations such as sequencing, reversibility, and comparison of separate stimulus sets which should be useful in dealing with television and extending its content to a child's own behavior.

The tasks are appropriate for seven-year-olds as well as four-year-olds, so they could be used if this older group is studied later. Some of the tasks would be passed by all seven-year-olds probably, but there would still be some tasks in which performance would be transitional and some which the child could not yet master.

Pretests with bright three-, four-, and five-year-olds have indicated that children of this age will attempt each task, some of them will pass some of the tasks, some of them will give transitional performance, and all of them will not yet have acquired some of the concepts. All eight tasks required about fifteen to thirty minutes total to administer.

To measure the amount and type of positive social behavior children display in a naturalistic setting an observation system has been devised and pretested (see Attachment 3). Martha Bronson, an Ed.D. student, has taken major responsibility for this.

The system provides an indication of the types of behaviors the child engages in, the frequency with which he/she completes a social or non-social interaction, how successfully it is completed, the strategies used during the interaction, the affect involved, the number of such events, and the length of time devoted to each. After much development time, it now seems to reflect the nature of the observed interactions, to correspond to teachers' evaluations of the competencies of the children observed, to provide for

reasonably reliable scoring by two observers (although formal reliability estimates have not been made yet), and to present the same picture of the child at different observations on the same or different days while indicating situational variability in the child's behavior.

The observation technique is a modified time sampling procedure. Each line of the observation sheet represents a fifteen second interval. The beginning of each interval is signaled by a sharp click from an electric timer into an earphone worn by the observer. The timing device is light and worn around the neck so that the observer can easily move about (Leifer and Leifer, 1971). Continuous events are recorded by a vertical line extending over all the intervals the behavior occurs, isolated events are recorded by checks or letters as indicated in the instructions. Thus, the final record shows the frequency with which events occurred and the length of time over which they continued.

Pretesting is still being done to determine how long and when each child should be observed to obtain a reliable estimate of his/her behavior. Currently we believe that two observations of about fifteen minutes each will be sufficient if they begin when the child is engaged in a social interaction. A separate simple recording of how much of each day a child devoted to a variety of social and non-social interactions can also be made if one is interested in how a child distributes his/her time among these types of activities. This information would not be obtained in fifteen minute observations.

Cooperative behavior will also be measured in an experimental setting that closely resembles one of those shown in the tapes. The situation will be one of those devised by the Teaching Research Group in Oregon. The current choice is the "mural situation." Here two children are given a long piece of paper and six colored crayons and asked to finish a picture of a house the experimenter has started. In pretesting in Oregon this situation produced much hostility and competition, so it is a good place to look for increases in cooperative behavior (see Attachment 4). One Sesame Street piece shows exactly this situation, although elements of the presentation might detract from its effectiveness. Two adult men draw on either end of a long piece of paper, conflict over space, and finally cooperate to draw a house together. A narrator verbalizes the sequence as it appears visually. A second piece shows three children, one with paint, one with brushes, and one with paper. They look perplexed, then share their resources and paint happily. This is more characteristic of what I would consider good teaching strategies but not so similar to the testing situation used in Oregon. Combining resources for a final goal or product is also a theme of many other Sesame Street prosocial pieces. Thus this situation should be a good one to use for testing. It has not been pretested yet here.

Estimates of how much each child watches Sesame Street, how long he/she has watched, and how familiar he/she is with each of the characters will be obtained from each mother. These questions should take no more than fifteen minutes to answer and will be done at a time that is mutually convenient for the mother and researcher. They have not yet been decided upon precisely nor pretested.

If it is feasible at the end of the study, children will again be shown one of the experimental tapes. They will be asked what the material is about, why people were doing what was on the tapes, why they were shown the tapes, whether they liked the tapes, and whether the situations they saw were "real." The experimental situation will be recalled for the child (video-taped if possible) and his/her interpretation of it obtained, along with an explanation of how he/she viewed his/her behavior and why he/she behaved as he/she did.

While the children are viewing the tapes, one adult will record the general attentiveness of the group. The technique has not been decided upon.

Procedure

An outline of all the activities and phases of the study is presented in Attachment 5. The procedure for each child will be described here.

Before viewing any tapes, each child will be observed for fifteen minutes on each of two separate days in school. This will require no direct contact with the child, although he/she will know that someone is following him/her around, watching and writing. Each child will also spend fifteen to thirty minutes individually with two different experimenters. The Piagetian tasks will be administered then in a standard order by one of them and the other will observe the child in the mural situation. Random pairs of the same sex will be used.

About two weeks later children will be divided into groups of five or eight. Each group will be shown tapes from one of the three conditions.

An adult experimenter will sit with the children, operate the videotape unit, rate their attention during the tape, and return them to class. The children will be free to move around and talk within the room, which will be as much a part of their usual school environment as possible (e.g., a corner in the classroom, a room next door, the nurse's office). Children will see at least three different tapes either three or five days a week, one tape a day, for two to four weeks. These decisions about number of days per week and number of weeks will depend upon how much material is available, how many days per week children attend school, how many days the teachers are willing to have us there, and how much of an effect is apparent after two weeks. In this regard, testing some children after two weeks might give a basis for deciding whether to continue for two more weeks.

At the end of the two to four week period children will again be observed in their classrooms and in the experimental mural situation. Each child will be randomly paired with another of the same sex from the same condition for the latter testing.

If it is possible, we'll return to the school about a month after this. Each child will again be observed during class and in the experimental situation. In addition he/she will be shown one of the tapes again and individually interviewed in a semi-structured way about the content of the tape, the purpose of showing the tapes to him/her, the reality of the tape content, and the type of behavior the child displayed in the experimental setting and reasons for it.

Analysis

It is assumed that at least 20 subjects in each condition will have seen all or nearly all of the tapes and have been tested on all measures. Data from these subjects will be analyzed in a 3 x 2 x 2 analysis of variance for the following dependent measures: positive social behavior in school (probably a number of different measures from the observational data), cooperative behavior in the mural situation (perhaps uncooperative behavior if the two aren't reciprocal), and the same measures taken one month after exposure.

Cognitive Level	Initial Prosocial Behavior	Explicitness of Material: High	Moderate	Low
High	High			
	Low			
Low	High			
	Low			

Marcus Lieberman, a statistician, and I are exploring the possibility of specifying from these data the optimum explicitness of social material for children of given cognitive and social skills, even if this level is not one of the three tested. It seems possible to set up systems of equations whose solution would be the optimum level at which to pitch the television material. This will be explored further in the next month or two, and such analyses will be carried out if indeed the system of equations can be set up and solved.

Participants and Budget

Four students are currently involved in this study: Martha Bronson, Francis Juhasz, Michael Siegal, and Elizabeth Weiss. Additional assistance will be necessary however, to carry out the observations, videotape viewing, and data analysis. Hopefully, this will come from the participation and hiring of other students. A budget for assistants' salaries and other expenses associated with the study is included in Attachment 6.

REFERENCES

Bandura, A. Influence of models reinforcement contingencies on the acquisition of imitative responses. J. pers. soc. Psychol., 1965, 1, 589-595.

Bandura, A., Ross, D., and Ross, S.A. Imitation of film-mediated aggressive models. J. abn. soc. Psychol., 1963, 66, 3-11.

Bogatz, G.A., and Ball, S. The second year of Sesame Street: A continuing evaluation. New Jersey: Educational Testing Service, 1972.

Collins, W.A. Intra-presentation factors in the relationship between media violence and aggressive behavior in children. Unpublished Ph.D. dissertation, Stanford University, 1971.

Cowan, P.A., Langer, J., Heavenrich, J., and Nathanson, M. Social learning and Piaget's theory of moral development. J. pers. soc. Psychol., 1969, 11, 261-274.

Fein, D.A. Judgments of causality to physical and social picture sequences. Develpm. Psychol., 1973, 8, 147.

Flavell, J.H. The developmental psychology of Jean Piaget. New Jersey: D. Van Nostrand, 1963.

Grusec, J.E. Effects of co-observer evaluations on imitation: A developmental study. Develpm. Psychol., 1973, 8, 141.

Henshel, A. The relationship between values and behavior: A developmental hypothesis. Child Develpm., 1971, 42, 1997-2007.

Holaday, P.W., and Stoddard, G.D. Getting ideas from the movies. New York: Macmillan Company, 1933.

Isen, A.M., and Levin, P.F. The effect of feeling good on helping: Cookies and kindness. J. pers. soc. Psychol., 1972, 21, 384-388.

Leifer, A.D. et al. Developmental aspects of variables relevant to observational learning. Child Develpm., 1971, 42, 1509-1516.

Leifer, A.D., and Leifer, L.J. An auditory prompting device for behavior observation. J. exp. child Psychology, 1971, 11, 376-378.

Leifer, A.D., and Roberts, D.F. Children's responses to television violence. In J.P. Murray, E.A. Rubinstein, and G.A. Comstock (Eds.), Television and social behavior, vol. II. Washington, D.C.: U.S. Government Printing Office, 1972.

Maccoby, E.E., and Wilson, W.C. Identification and observational learning from films. J. abn. soc. Psychol., 1957, 55, 76-87.

Michotte, A. Perception of causality. New York: Basic Books, 1963.

Moore, B.S., Underwood, B., and Rosenhan, D.L. Affect and altruism. Develrm. Psychol., 1973, 8, 99-104.

Murray, J.P., Rubinstein, E.A., and Comstock, G.A. (Eds.), Television and social behavior, vol. II. Washington, D.C.: U.S. Government Printing Office, 1972.

Sigel, I.E. The distancing hypothesis revisited: An elaboration of a neo-Piagetian view of the development of representational thought. Paper presented at the Third Annual Western Symposium on Learning, Western Washington State College, 1971.

Stein, A.H., and Friedrich, L.K. Television content and young children's behavior. In J.P. Murray, E.A. Rubinstein, and G.A. Comstock (Eds.), Television and social behavior, vol. II Washington, D.C.: U.S. Government Printing Office, 1972.

Steuer, F.B., Applefield, J.M., and Smith, R. Televised aggression and the interpersonal aggression of preschool children. J. exp. child Psychol., 1971, 11, 442-447.

Thomas, S.A. Violent content in television: Effect of cognitive style and age in mediating children's aggressive responses. Proceedings, 80th Annual Convention, American Psychological Association, 1972, 97.

Turiel, E. An experimental test of the sequentiality of developmental stages in the child's moral judgment. J. Pers. soc. Psychol., 1966, 3, 611-618.

ATTACHMENT 1

CHARACTERISTICS OF THREE CATEGORIES OF TELEVISION MATERIAL

	Explicitness of Material[1]		
	High	Moderate	Low
Use of humans	high	mod	low
Use of muppets, animals, and forms	low	mod	high
Use of verbal explanation of action	high	mod	low
Depiction of exact prosocial behavior	high	mod	low
Depiction of conflict prior to resolution	low	mod	high
Depiction of rewards (affective and material) after prosocial behavior	high	mod	low
Depiction of negative consequences	low	mod	high
Use of material for positive self-concept[2]	low	mod	high

[1] This rating will be for each tape, not for each piece within the tape. For example, the moderately explicit tape will have some pieces showing exact prosocial behaviors and some not, the highly explicit tape will have more pieces showing exact prosocial behaviors, etc.

[2] Presumably this material is desirable in all three tapes, but will occur less often in the highly explicit tapes because more time in these tapes will be devoted to exact portrayal of interpersonal behavior.

ATTACHMENT 2

EXAMPLES OF SESAME STREET PROSOCIAL MATERIAL

Title	Show	Time	Humans[1]	Muppets Animals Forms[2]	Verbal Explan.	Pro-social Behavior[3]	Conflict	Rewards[4]	Negative Outcome[4]	Self Concept	Appeal[5]
VTR: Coop Fish Fry	270	1:24	M,W	No	Yes	No	No	M	No	No	L-M/
Larry & Phyllis Photographs	135	4:38	M,W	No	Yes,term	S	Yes	M,A	No	No	L/
Oreg. #3	282	1:43	M,M	No	Yes	S	Yes	M,A	No	No	H/
A.M. kids have a snowball fight	454	2 1/2?	W	M-B,G	Yes	JE	Yes	A	M,A	No	M-H/

[1] M = Man, W = Woman, B = Boy, G = Girl

[2] M = Muppet, A = Animal, F = Form

[3] JE = Joint effort, S = Share, H = Help, NE = New element

[4] M = Material, A = Affective

[5] L = Low, M = Moderate, H = High

By our estimate where possible we'll add distractor results

ATTACHMENT 3

OBSERVATIONAL SYSTEM

EXECUTIVE AND SOCIAL CONTROL PROFILE FOR PRESCHOOL CHILDREN

Martha B. Bronson
Harvard University
February, 1973

I - RATIONALE

The Executive and Social Control Profile is designed to measure the preschool child's functional level of competence in either coping with tasks or social interaction or both (depending on the way the Profile is used - see section below). Executive control is defined as skill in choosing and coping with tasks effectively. It requires the ability to select tasks appropriate to one's level of skill, to organize task relevant materials, to use effective coping strategies, to resist distraction, to notice errors and to correct them or to effectively summon help, to try repeatedly (persist) when necessary, and, ultimately, the ability to reach a chosen goal successfully. Social control is defined as the ability to control and direct oneself adequately and constructively in social situations and the ability to influence others effectively in socially approved ways. Since approved methods of social control of others vary with the culture or sub-culture, any assessment of a child's competence in this area necessarily implies value judgments. The judgment implicit in the categories of this profile is that a general attitude of negotiation and reciprocity in dealings with others is a desirable goal and standard of measure for the preschool child's behavior. It is assumed that the ability to assume this attitude and to exhibit effective give and take (reciprocity) in social situations is emergent during the preschool and early primary school years (whether this emergence is explained by a decline in "egocentrism" or by a growth in the number of effective social strategies at the child's command). The ability to adjust to the goals and personalities of others while retaining one's own identity and goals is thought to be basic to reciprocity. This implies the ability to control or influence others with effective but non-violating strategies (physical force is considered to be a strategy which violates the social other), and the balancing ability to be reasonably influenced by the group without being totally overcome or dominated by others. The ability to assert one's rights and sometimes (though this is rarer during the preschool years) the rights of others is also considered important. Specific strategies which promote cooperation such as sharing, helping, or combining resources are especially noted.

Effective executive control may or may not be accompanied by effective social control in any single child, but it is assumed that some measure of executive control is necessary for the development of adequate social control strategies.

II - USE OF THE PROFILE

The executive and social control profile can be used in at least three ways. First, the child's general level of functioning in the natural setting (home or school) can be assessed by observing and recording the child's behavior for a representative sample of time. This should yield an index of the child's spontaneous choices and goals (social and non-social) and his ability to deal with them. Second, only selected behaviors might be observed and scored such as spontaneous social interactions or spontaneously chosen non-social tasks. This should provide a picture of the child's level of functioning in either the social or the non-social areas with much less observation time than the broader "total picture" method. Third, specific controlled tasks or play situations may be constructed and the child's behavior during these sessions may be observed and scored. This method will allow more reliably for comparisons between children but will not give information on the child's spontaneous choices and his ability to carry them out.

III - SCORING CATEGORIES

Activities: The activities section should list:

-specific behaviors or activities listed in the "focus" section
-the people (adult or peer + age and sex) from whom the child asks help, those whom the child attempts to control, those whom the child follows, those from whom the child accepts stated rules, or refuses to accept them, those by whom the child is controlled or whose control the child resists or ignores, those to whom the child asserts his rights, and those with whom the child uses a cooperation strategy
-specific situations scored in the "social interaction" section
-specific behaviors or affect manifestations listed in the "affect" section.

General Instructions and Conventions:

-unless the situation to be observed is controlled or structured by the experimentor or the observer, observations should be scheduled when children will have free choices about which activities to engage in
-after observing a child for the specified period, stop and check over the observation sheet to fill in all possible information.
-on the back of the sheet(s) write a paragraph with at least the following information: who the child was interacting directly with, who was in the general area, what the general area was (e.g. "art area," "block room," "kitchen"), what the general tone of the episode seemed to be (e.g. hostile, controlling,

cooperative, competitive etc.) and some sort of narrative description of the events observed
- when observing, one should first learn all the general ground rules of the school, home etc. from the responsible adult(s)
- the three categories under "focus" can be scored with a vertical connected line (for a time line) as long as one focus continues - a change in focus can be shown by separation in time, change in area of focus, or a horizontal line dividing the two foci - returns to a focus after a distraction, interruption, or intervening activity (like the bathroom or getting juice) can be scored by joining the lines in either social or non-social foci with a circle
- the other categories can be scored with a ✓, C (completes), N (no), S (success), V (verbal), P (physical), D (demonstration) - as appropriate and continuation into the next time period can be shown by a vertical line connecting with the check or letter. The "type" sections in the "focus" section should have some indication of the particular type of social or non-social activity (the classification) and the "cooperation strategy" section should indicate whether the strategy involves sharing (S), helping (H), or combining resources (CR).
- the following areas would be scored once rather than continuously in a time line fashion when relevant: dual focus, gives up, completes/no, success/no, social control S/N, and refused to accept rules (N) - resisting/ignoring control S/N, and asserts rights S/N can be scored by a time line ending in S or N
- each horizontal line crossing the "activities" section indicates a 15-second interval - double lines indicate one minute - there are 5 minutes on a page.

Focus: The direction or goal of the activities is indicated here in time line fashion. A line is drawn downward corresponding to the number of 15-second intervals during which the child pursues an activity. The categories under "focus" are to be scored only when the child is actively (though involved watching is included - see later description), purposefully engaged, not when there is a brief encounter without engagement. All clearly focused activities should be labeled for ease of discriminating a change of focus. Involved watching of any social or non-social activity should be scored under the appropriate focus category by a circled "W." Notation in the "type" category should indicate the nature of the involvement. Sometimes the primary focus of the activity will be unclear or divided as in the case of parallel play. In these cases score both the relevant social and non-social categories.

- Social - any activity directed largely or primarily toward getting or maintaining contact or interaction with another person (peer or adult.) The object of the activity should be noted in the "activity" section

- Parallel Play: two or more children playing side by side and appearing to be relating to each other but actually each "doing his own thing"
- Associative Play: two or more children in a social interaction which is above the level of parallel play - e.g. some legitimate interaction is occurring but it is either very one-sided or not at a very high (reciprocal) level - not yet at the level of cooperative play
- Cooperative Play: two or more children engaged in the type of play in which each listens to the other and takes into account the others wishes and ideas - in which both (or more) sides contribute to the outcome in some obviously reciprocal way
- a number of social interactions (especially those with adults) cannot be scored under these three categories - sometimes the child's aim seems simply to be contact, warmth or attention - and should be described in "activities"

- Non-Social - any solitary or primarily self-involved activity in which another person is either not present or not the focus of the activity
  - Mastery: any activity directed primarily at mastering a skill (except gross-motor skills) such as doing a puzzle, writing letters or numbers, learning to read etc., at constructing a product (like art work, lego or building with blocks), or at finding out about something (looking at a book, listening to a story, observing or handling an animal, intent observation of or exploration of something in the physical environment - like playing with magnets, watching clouds or wind blowing leaves etc.)
  - Gross motor: Practicing physical skills such as climbing, jumping, dancing etc. should be listed here if clearly a focused activity (involves sustained directed attention to what one is doing).
    Some gross-motor activities seem to be mere tension release behaviors when a child is otherwise involved in a social or non-social activity and others seem to be general indicators of "state" (excitement, tension etc.) rather than a focused activity. These last two types of gross-motor activities should not be scored at all if they occur outside of a focused activity or during another focused activity but do not interrupt it.
  - Fantasy: solitary fantasy play such as dress up (if non-social), some forms of doll or puppet play, dreamy meditation, some play with toy animals, water or clay (though these last two are more often part of mastery activities).

Task Competence: This general category deals with the child's ability to plan and to carry out activities. It applies only to non-social activities. The sub-categories can be scored in either a checklist or time-line (if the activity exceeds 15 seconds) fashion where relevant. See the above "general instructions and conventions" section for explicit instructions.

- Organize Activity or Coping Strategy - Organize activity is scored when child engages in any preparatory or organizing activities in the process of coping with a task. Examples are: gathering materials together, arranging materials for ease of access, laying out or sorting materials before assembling. These activities should be scored "O" in this column (with a time line if relevant) and the specific behavior listed in "activities." Coping strategy is scored when a child displays a discernible strategy in attempting to solve a problem or do a task. Examples would be: filling in the edge pieces of a puzzle first, taking advantage of built-in color or shape codes, organized trial and error (trying a piece and laying it aside, trying another and so on putting tried pieces together to avoid repeated mistakes.) These strategies should be scored "C" and the specific behavior listed in "activities."
- Distracted - any change of focus from ongoing directed activity that is not the result of a demand interruption. The child may look up or stop what he is doing and turn around when he hears a noise, when he briefly loses his balance on a chair, when the room gets noisier or quieter, when the light level changes etc. Distraction may result in a change of focus (leaving the ongoing task not completed), in annoyance (score neg. affect), in a "return" to the original focus, etc.
- Interrupted - any demand distraction like an adult or a child talking to the S, bumping into him, knocking over his materials etc. If the child is pleased by the interruption (pos. affect) or not pleased (neg. affect) this should be noted. If he tries to ignore the distraction, note it in the activities section. Interruptions are anything directed at the child being observed and also occurrences in the general environment that most children present attend to. If there is any doubt about something being an interruption score it as a distraction.
- Dual focus - or "dual attention" (Maccoby, 1967, 1969; Maccoby and Konrad, 1967; White, Watts et al., 1972) involves the ability to attend to the task at hand without losing track of the surroundings - the ability to monitor the environment without losing the primary focus. (Probably a measure of voluntary control of attention.) The child appears to take note of (looks up briefly, smiles or frowns at an event outside focus, makes brief comment) his surroundings without losing his hold on his central task or focus. This is distinguished from the "distracted" category by whether or not the child loses his hold on the task at hand.

- Ask help - must be the child's initiation. Help gratuitously offered during a task should be scored an interruption and the result (resists, accepts, changes focus etc.) should be noted in "activities." Note from whom the child seeks help, whether the child is successful in getting help or not (under success/no) and whether he tries again if he is not at first successful.
- Corrects self - should be scored any time the child corrects an error in his ongoing activities. Trial and error may also be scored here as when a child tries something (perhaps a puzzle piece) sees that it doesn't fit and takes it away. Spontaneous verbal self-correction and physical skill self-corrections should also be scored.
- Gives up - not scored for all non-completed tasks, but only for those where the child obviously gives up a chosen goal. This may be because the child becomes tired (perhaps through choosing too long or too hard a task) or because of failure and/or frustration.
- Tries again - includes any repeated attempt to solve a problem, gain a goal etc.after mistakes, failure or frustration. Note that "tries again" may or may not precede or follow "corrects" self.
- Completes/No - a check here indicates some organized and discernible completion or wind-up activity like putting away materials, cleaning up blocks, etc. It is scored only after the fact (i.e. the completion has taken place) rather than during the process of cleaning or finishing up which is considered part of the task proper. Note that completes may not mean completes "successfully." Some activities may have two "completions" since the picking up or putting away part of the activity is functionally separate from the original task. For instance constructing a house with lego can be completed and picking up and putting away the lego may be completed. The two completions may be scored at the appropriate times and the reasons for them noted in "activities." -No or N is scored any time the child leaves the task without winding up in any way. It involves a change of focus in midstream without any "end" to the previous activities. Score No if child fails to complete the task (for instance a puzzle) and a subsequent check in the completes column if he puts the puzzle away, and explain in the activities section.
- Success/No - a check here indicates that some task or goal is reached successfully. It may or may not coincide with a "completes" score (both are scored in this case) and may occur in cases where "completes" is not relevant. The goal can be doing a puzzle, getting help from a teacher or child when it is sought. The size of the unit of behavior to be judged becomes a problem here, because "success" for one child is writing one number correctly while for another it is writing a whole page of numbers. Often the child will state a goal, but even in the absence of this, close observation will usually identify the correct level and unit of analysis - the end or completion of tasks is usually important for judgment, but sometimes meaningful sub-goals can be discerned.

If in doubt, do not score.

-No or N is scored when there is an obvious failure to reach a chosen goal. Momentary setbacks or frustrations or errors should not be scored here - it is the total outcome of any directed activity that is scored plus any clear sub-goals as in "success" section. For instance the failure to fit one puzzle piece which leads the child to try another should not be scored as no success, but if the child cannot do the puzzle at all No or N should be scored.

Social Interaction: This general category deals with the child's ability to cope effectively with social interactions - that is, to control and direct himself or herself adequately and constructively in social situations and to influence others effectively in socially approved ways.

- Converse - is scored when the child carries on a conversation with another person (adult or child and note which in "activities") with the primary intent (indicated by the verbal content) of communicating with (rather than controlling or seeking help etc.) the other.
- Social Control V/P/D: Success (S)/No Success (N) - Social control is scored when the child attempts to control or manipulate others or to get their attention (note whether adult or peer in "activities"). V is scored when any attempt to manipulate or influence others by the use words is made. Everything from "I won't be your friend if you don't...." to "We'll get in trouble if we...." to "I know a good game; you be the pilot and I'll be the control tower" is scored here. Whether or not the attempt is successful or not is indicated by a following S or N (if the attempt occurs in under 15 seconds VS or VN would be listed; otherwise the S or N should be marked at the end of the time line). P is scored when the child tries to influence, manipulate or control others by means of physical force like pushing, dragging, hitting, biting etc. P is scored only for physical coercion but may be scored double if used in conjunction with verbal direction (e.g. VP plus S or N). D is scored when the child tries to influence others by means of modeling or some form of demonstration. This is scored for success or no success above.
- Competes S/N - is scored when the child competes in any way or for any reason (note these in activities) with another. There may be competition for the attention of another, for resources, or "to win," "be first," or achieve skills. Success or no success in these attempts is scored by the use of S or N either alone to indicate an "event" (under 15 seconds) or at the end of a time line. Score this category only when the child seems clearly aware of the competition - not, for instance, when he is trying to get attention or help and others just happen to be getting or keeping the adult's attention. Sometimes the child's statements, such as "I can do it faster (or better)" or "I'll get there first," clarify the intent. If in doubt, do not score.

- Follows V/P - indicated physical (P) or verbal (V) following of an adult or peer (note who in "activities"). P is a measure of direct or immediate rather than deferred imitation of physical acts and the immediate effects of social others on the individual. Physical "following around" of adults or peers is also included. This is an attempt to get at the child's sense of himself as a separate entity. V is scored when there is a direct verbal imitation of a single individual or in "group contagion" or when the child indicates following by verbal expression ("I'll do that too," "Then he won't be my friend either," "Then I'll have juice too"). "Follows" is scored only when the child follows or imitates another and that other has given no verbal indication that the child is supposed to imitate. Following is always spontaneous.
- Controlled V/P/D - indicates that the child is being successfully manipulated, or directed, verbally (V), physically (P), or by gesture or demonstration (D) (as when a child makes a "come here" gesture, a "go away" gesture, a "shhh" gesture etc. or when the teacher demonstrates to a child something he is supposed to do). Indicate who is doing the controlling in "activities." Note that a V, P, or D for "controlled" is scored only when a control attempt has been made and the child goes along with it.
- Accepts rules/No - a check here indicates the child's ability to deal with social or physical reality. Acknowledging and abiding by rules (having to pick up toys, waiting your turn for juice or in a game) when stated or reminded. Always judged by the child's response to a specific situation of imposed constraint, often to a specific verbal request or reminder ("Please put your things away now," "You are not allowed to bother my game," "You have to wash your hands before you put out the cookies").
- No or N indicates a child's inability or refusal to accept the constraints inherent in a certain activity or general "ground rules." Specific refusals or deliberate "violations" or ignoring requests rather than distracted "forgetting" should be scored. If in doubt, do not score.

  Controlled V/P/D and Accepts Rules/No can be discriminated on the basis of whether or not the request or demand is a rule of the environment the child is in. Many teacher or adult restrictions are of this variety ("You can't hit in school," "You have to stand in line," "Sand is not for throwing" etc.) but sometimes the adult uses controlling tactics that do not involve rules ("Come play this game with me now," "Please share your book with Tommy," "Let me show you how to do that" etc.) and sometimes peers can state rules which can be accepted or not ("You are not allowed to touch my work," "Only three people are allowed to play this game; the teacher said so," "We're not supposed to go in there" etc.). Note that it is not always desirable for children, even preschoolers, to accept all rules. There may be instances in

which the child should assert his/her right to disobey the rule or to do away with it. Note this protest in activities.

- Resists or Ignores Control S/N - is scored in those instances when a peer or an adult tries to control the child and the child does not go along with it. A score for Success (S) or No Success (N) is somewhat redundant since N would be indicated by a score in "controlled," however this added information is included for clarity (so it is clear that the child tried whether or not he was successful).
- Asserts rights S/N - is scored when a child demands his rights when it is not a case of resisting outside control. "Asserts Rights" is always the child's initiative and "Resists Control" is always initiated by another. Instances of "asserts rights" are "It's my turn now; I was after John," or "I am supposed to pass the juice today; you promised me yesterday." "Nobody can play with that truck because it's mine" might be "asserts rights" if there is no outside threat, or it might be "resists control" if another child is trying to take it away.
- Cooperation Strategy S/H/CR - indicates a particular coping strategy for effective social interaction.. It may be directed at a child or an adult. S indicates a sharing strategy. It is important for this and for all strategies that the child intend to share and initiate the sharing in order to cope effectively with a situation or in order to show friendliness or affection. If the child responds to a conflict situation by saying "OK, let's share it" or "let's both play with it" that is scored S, but if the child is told to share by the teacher or the initiative comes from the other side (either by suggestion or by force) the behavior is scored under "controlled."
  H indicates a helping strategy and is usually an act of friendliness or affection. If the child is asked to help by the teacher or the other child the behavior is scored under "controlled."
  CR indicates a strategy of combining resources either to produce an effect or achieve a goal. It is a measure of cooperation, and, as in the case of the other strategies, must be initiated by the child in order to be scored. Combining resources that is initiated by another is an instance of "controlled."

AFFECT: Affect is listed as only positive or negative in both individual ("Affect Pos./Neg.") and social ("Affection" "Hostility") forms. Only "Pride" is included as a more specific emotion because of its possible connection with self-awareness and self-concept. Otherwise, only the positive/negative discrimination is required because of the difficulties inherent in accurate discrimination of emotions. Note any apparent cause of the affect in "activities" as well as the particular form of the affective expression (e.g. smiling, crying, hitting etc.)

- Affect Positive/Negative - P (positive) is scored when there is any indication of (expression of) pleasure at any time during the observation. These might include anything from smiling, laughing, singing to self, to verbal expression - "I like this" or "This is fun." N (negative) includes any obvious signs of displeasure including frustration, anger, fear, anxiety etc.
- Pride - is meant to be a measure of perceived (by the child) competence and is thought to be connected with self-concept. It may often be distinguished by its verbal accompaniment - "Look what I did!", "I can do that!", "I can tie my own shoes!" - but is sometimes detectable in non-verbal behavior such as looking at a finished product and smiling, showing product to another etc. Expressions of pleasure upon the successful completion of a task requiring physical skill (climbing a tall ladder, sliding down a slide, turning a summersault etc.) should also be scored. Do not score wild boasting ("I can run faster than anyone in the whole world" etc.) here. Note in the "activities" section the apparent occasion for the "pride."
- Affection Verbal/Physical - V (verbal) or P (physical are scored if a child shows physical or verbal affection (if both score VP) to an adult or peer. Examples may be hugging, patting, kissing, "I like you" or "You are my best friend," "are nice," "are pretty" etc. Note the form and direction (adult/peer) of the affection in "activities"
- Hostility Verbal/Physical - V (verbal) or P (physical) are scored if a child shows physical or verbal hostility to another peer or adult such as hitting, pinching, knocking over their toys or taking them. "I hate you," "You are stupid." This may coincide with physical social control and may be scored concurrently. The difference between this category and physical social control is the goal of the activity - social control is primarily an attempt to get someone to do something and hostility may or may not accompany it.

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ATTACHMENT 4

OREGON TEACHING RESEARCH GROUP

REPORT ON MURAL SITUATION

General Information

Eighteen children were tested. The frequency of various strategies was as follows: distributing 5, taking turns 3, combining 1, combining ideas 3, compromise 0, distraction 0, decision mechanism 0, fighting 10, intimidation 3, constructive response 1, reflection of mood 4.

Situation 3

A piece of paper about 1 1/2 feet long is set out. Again the bare outline of a house is drawn on the paper by the examiner. Six different colored crayons are put out and two children are led into the room. The examiner directs the children to take a crayon and draw a picture. The examiner starts, "I have started a picture of a house. You have six colors. I want you to finish the picture." No further cues should be given initially as to spacing, choosing colors, what specifically to draw. In all situations, the examiner should then step back and, as much as possible, give the impression that he is removed from the subjects' interactions.

Comments

It produced less cooperation than any of the other situations. The predominant tone in all four situations was hostile and competitive. In most cases, the children would start right in drawing what they pleased with little regard for context. In several cases there was brief conflict in choosing the crayons, but the mutual intensity was not great enough to promote a cooperative solution. More commonly, the children would simply draw with whatever color they grabbed first. Space proved a great conflict area, but this competition was solved not by cooperation but by intimidation or, in two cases, by the inception of physical hostilities which required the intervention of the experiment. The subjects' perceptions of their peers' drawings were not with regard to forming a whole picture, but rather competitive and disparaging.

Taken from: Interim Report #4: Sesame Street Evaluation Project. Teaching Research. Monmouth, Oregon 97361

ATTACHMENT 5

GENERAL PLAN FOR THE STUDY

First

1. Devise an observational instrument, test reliability and validity
2. Select and pretest an experimental situation for prosocial behavior
3. Select material for viewing and have tapes made
   A minimum is nine 20-minute tapes and a maximum is twenty 20-minute tapes
4. Select and pretest cognitive measures
5. Find schools and obtain parental permission

Second

1. Measure level of cognitive development -- 75 children, 1/2 hour each
2. Observe in school setting -- 75 children, 3/4 hour each
3. Test in experimental setting -- 75 children, 1/2 hour each
4. Get estimate of how much child views Sesame Street now -- 75 mothers, 1/2 hour each

Third

1. Divide children into three groups
2. For minimum of two weeks and maximum of four weeks show them tapes
   9 groups of children, 3/4 hour each, 3 to 5 times per week
   Rate attentiveness of each group to each tape
3. Observe in school setting -- 75 children, 3/4 hour each
4. Test in experimental setting -- 75 children, 1/2 hour each

Fourth -- Hopeful

1. Return in about a month
2. Observe in school setting -- 75 children 3/4 hour each
3. Test in experimental setting -- 75 children, 1/2 hour each
4. Interview children about their behavior, content of the tapes and reason for showing tapes to them -- 75 children, 3/4 hour each

ATTACHMENT 6

PROPOSED BUDGET

Personnel	$5280
2 half-time assistants @ $3.50/hr. January 29 through June 29	3080
hourly employees @ $3.00/hr. 400 hours	1200
secretarial help	1000
Equipment and Supplies	2550
20 1/2 inch one-hour tapes @$25 each	500
video rental and repair (most of equipment needed we have now)	1000
experimental supplies	200
office supplies	500
xerox	150
2 timing devices @$100 each	200
Travel	450
local travel	150
4 trips to CTW @ $75 each	300
Report production	500
Computer	1094
40 hours keypunching @ $6/hour	240
3 hours consulting @ $10/hour	30
6 months locker rental @ $4/month	24
computation time, print, etc.	800
TOTAL	$9874